

ON SOME OLD WORLD SPHINGIDAE.

BY DR. KARL JORDAN.

(With 7 text-figures.)

1. *Dovania neumanni* sp. nov.

♂. In structure closely resembling *D. poecila* R. & J. (1903), but much smaller, the abdomen not distinctly banded, the hindwing not ferruginous, etc.

Head and thorax dark russet, with an intermingling of narrow white scales at the sides, abdomen olivaceous black, posteriorly with some white scales, at sides partly pale drab, this colouring appearing in an oblique aspect as transverse patches; underside blackish olive, palpi darker, breast somewhat russet, legs with an admixture of white scaling, which forms a spot at apex of first hind-tarsal segment; first foretarsal segment with four long spines as in *D. poecila*.

Upperside of forewing nearly as in *D. poecila*: ground olivaceous black, much shaded with blue-white scales between the black markings, base dark, at one-third two black transverse lines, curved obliquely basad at both ends, the outer one broad, partly divided by some blue scaling into two lines, stigma pale yellow, on disc a black band, slightly curved in S-shape, well defined on proximal side, diffuse distally, outside this band a pale line bearing blue scales, its distance from proximal margin of black band 3 mm. at costa, 4 in middle of wing and 2 mm. at hindmargin, before apex a triangular black patch outwardly bounded by a thin white interrupted line.—Hindwing olivaceous Vandyke brown, with an indistinct dark line on disc, some blue scaling at termen, and pale fringe-dots.

Underside olivaceous Vandyke brown, pale blue scaling along termen of both wings and along costal margin of hindwing, near apical angle of both wings a small space bare of blue scales, abdominal margin of hindwing grey.

Genitalia of the same type as in *D. poecila*: anal tergite less pointed, anal sternite narrower and more claviform in a dorsal or ventral aspect; harpe (text-fig. 1) broad, almost gradually narrowed, with the apex truncate-rotundate and slightly denticulate; penis-funnel (text-fig. 2, P-F.) triangular, pointed, directed ventrad; penis-sheath (text-fig. 2, Pen.) with indication of a short longitudinal reddish-brown swelling which ends with a small subapical tooth, membranous lobe projecting from sheath covered with short hairs.

Length of forewing: 26 mm.

Hab. S.W. Abyssinia: Djimma, 14.v.1925 (Prof. O. Neumann), 1 ♂. Named in honour of the discoverer.

2. *Pseudodolbina fo celator* subsp. nov.

♂♀. The three males examined differ from Assamese and Sikkimese examples of *P. fo* in the harpe bearing a ventral tooth close to apex, variable in size (text-fig. 3). There does not appear to be any other distinction.

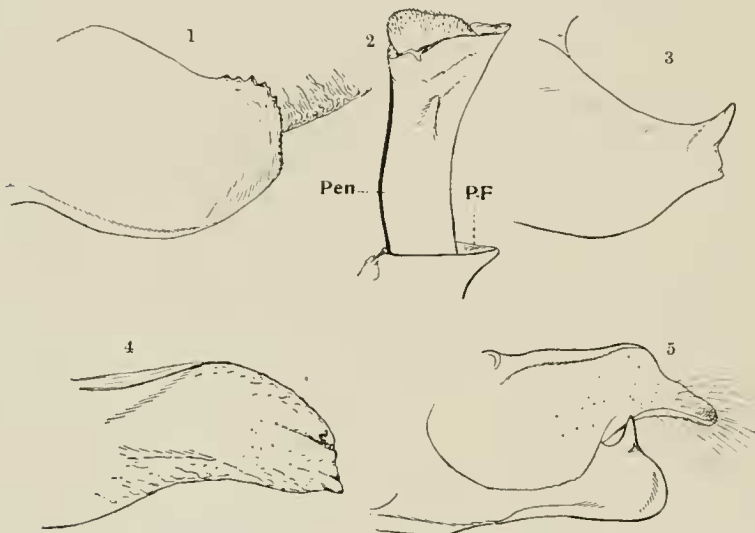
Hab. N.W. India: Dharmsala, viii.1924 (Major F. A. Scott), 1 pair, type ♂; Masuri, vii.-x.1922 (Mackenzie), 1 pair. Also in B.M.

3. *Marumba microta* Hamps. (1907).

This species belongs to *Agnosia*. We have now several ♂♂ obtained at light at Nagpur, Central Provinces, in August and October, a most welcome contribution to our collection by Prof. T. Bainbrigge Fletcher.

4. *Cypa decolor pallens* subsp. nov.

♀. Large; upperside: body and proximal half of forewing wood-brown, with a slight ferruginous tint, outer half of forewing shaded with pale sepia; hindwing ferruginous.—Underside: body pinkish buff; forewing pale ferruginous from base to three-fourths, terminal area clayish buff, with some diffuse darker tints in certain lights; hindwing paler than termen of forewing, being almost creamy buff. Markings as in *C. d. decolor*. Much paler than *C. d. decolor*, the forewing and body contrasting strongly with the upperside of the hindwing.



FIGS. 1 & 2.—*Dorania neumanni*.
,, 3.—*Pseudodolbina fo celator*.

FIG. 4.—*Lophostethus demolini negus*.
,, 5.—*Sataspes scotti*.

Length of forewing: 34 mm.

Hab. N.W. India: Masuri, 14.iv.1906: 1 ♀, received from Prof. T. Bainbrigge Fletcher.

5. *Lophostethus demolini negus* subsp. nov.

♂. The only specimen obtained is much worn, but nevertheless sufficiently well preserved for comparison with specimens from other districts of Africa, whence we have over a hundred in the collection.

Body and wings with a slight vinaceous-cinnamon tint. Wings, above, as deep-coloured as dark West African specimens, termen a little less undulate, subbasal dark stripe of forewing more prominent, creamy white cell-spot elliptical, discocellular spot different from that of all our other specimens in the costal branch being the longest (text-fig. 6). On underside the discal dark brown line (about halfway between cell and termen) well marked on both fore- and

hindwing; the black costal median patches rubbed away on all four wings, the forewing bearing, as a remnant of the costal patch, a line which is distinct costally and fades away towards hindmargin, whereas there is on the hindwing a prominent median line extending from costal margin towards anal angle; cell-apex of hindwing less oblique than usually, the upper cross-vein a little less than half as long again as the second. Anal tergite dorsally convex at each side before the tip, which is curved down and rounded; apex of harpe acuminate, slightly curved ventrad, with a small tooth at the tip and another above it (text-fig. 4).

Hab. S.W. Abyssinia: Kambatta, 1.v.1925 (Prof. O. Neumann), 1 ♂.

6. *Sataspes scotti* sp. nov.

♂. Body drab grey (Ridgway, 1886, pl. ii, 13), segments II and V to VIII dorsally and tail laterally blackish; tergite I (almost concealed under the hairs of the thorax), tips of side-tufts of abdomen, anterior surface of forecoxa, upperside of foretibia and -tarsus, and outer surface of mid- and hindlegs dull pale yellow, this colouring not at all conspicuous.

Upperside of wings: forewing less elongate than in *S. infernalis*, distal margin shorter and more convex, colour drab grey like that of thorax, termen dark hair-brown (Ridgway, l.c. iii, 12), this border about 1.5 mm. broad at tornus, gradually becoming broader and at costal margin from vein R^1 (= vein 6) suddenly being produced basad to middle, the grey area traversed by an obscure broad subbasal band, beyond one-fourth by a straight line, and in middle of wing by another somewhat broader line, which begins at middle of costa and ends a little beyond middle of hindmargin, these lines the same colour as the terminal band.—Hindwing like termen of forewing, shaded with drab grey from base to disc and anal angle, costal area (concealed) creamy, behind it some white hairs.

Underside drab, with a slight tint of cinnamon and a faint purplish sheen, which is also present on the upperside in certain lights.

Genitalia resembling those of *S. infernalis*, but horns of anal tergite rather slenderer, harpe more rounded at apex, its tooth smaller (text-fig. 5).

Neuration: in both wings R^1 (= 6) branching off beyond cell.

Length of forewing: 22 mm., breadth 7 mm.

Hab. N.W. India: Dehra Dun, 29.iv.1926, 1 ♂ bred by Major F. B. Scott, in whose honour the species is named.

The dull colouring is most strange for a species of *Sataspes*. This species probably is in colour a more ancestral type than the metallic mimetic species. The grey scales of the upperside of the forewing are nearly all long and narrow.

7. *Nephele lannini* sp. nov.

♂. Closely related to *N. bipartita* Butl. (1878). Antenna thicker. Forewing broader, the termen more convex than even in the female of *N. bipartita*, incurved below apex, which projects as a distinct hook.

Antenna pale buff down to middle. Black bands of abdomen not interrupted above, but here narrowed, there being a dark olive patch on segments 3 to 6; head and thorax dark olive, underside of thorax and abdomen paler; segment 1 of palpus and base of 2 as in *N. bipartita* white much mixed with dark olive scales.

Upperside of forewing olive, paler than thorax, without the ochraceous-buff or clayish patches of *N. bipartita*, the ground being unicolorous, lines dark olive, from tornus to costal margin a blackish olive stripe as in *N. bipartita* (black scales mostly short), on the distal side of the stripe a triangular area somewhat darker than the ground and very slightly mummy brown, widening towards termen, a minute white stigma, in an oblique view the dark oblique stripe widened on the veins into short streaks.—Hindwing with dark mummy brown tint shading into olive at base, fringe of termen pale ochraceous-buff.

Underside of wings like breast and abdomen somewhat paler olive than upperside of forewing, with a slight buffish tint, lines as in *N. bipartita*.

Length of forewing 38 mm., breadth 16.3 mm.

Hab. S. Rhodesia : Xmas Pass, Umtali, 14.v.1926 (bred) (E. W. Lannin), 1 ♂. Named in honour of the discoverer, of whose collection the specimen forms part.

The olive or green colouring of the species of *Nephele* is generally much faded in cabinet specimens, particularly if they have gone through a process of relaxing for setting.

8. *Macroglossum dohertyi melanura* subsp. nov.

♂. Segment II of abdomen with the yellow side-patch barely vestigial; tail black, with an admixture of chocolate scales (in *M. d. dohertyi* buff, in middle cream colour). Terminal border of hindwing strongly convex in middle.

Length of forewing : 22 mm.

Hab. Bismarek Archipelago : Telesea, N. Britain, i.1925 (A. F. Eichhorn), 1 ♂.

The ♂ from British New Guinea mentioned in the Revision of the Sphingidae, p. 648, has a similar terminal band to the hindwing and probably belongs to this subspecies; but as the abdomen is almost entirely denuded and there is only a small remnant of the tail left, we must wait for a better specimen before we can be certain.

9. *Macroglossum caldum* sp. nov.

Macroglossum calescens Butl., Roths. & Jord. (err. determ.), Nov. Zool. ix, Suppl. p., 639, no. 575, tab. 3, fig. 5 ♂, tab. 51, fig. 7 and tab. 56, fig. 33 (genit.) (1903) (Milne Bay; Fergusson; nec N. Britain).

The species described and figured by us in the Revision, i.e., as *M. calescens* is not that species. It differs from true *M. calescens* especially in the yellow side-spots of the abdomen being small and in the genitalia, see below.

Type from Milne Bay, S.E. New Guinea, iv.1899 (A. S. Meek).

10. *Macroglossum calescens* Butl. (1882).

The type, a ♀, has the abdomen somewhat soiled, which explains our mistake in identification. We have now four specimens from New Britain which a re-examination of the type proves to be *M. calescens*. The wings are practically the same in markings as in *M. caldum*, except that the orange band of the hindwing is on the whole a little broader than in the figure of *M. caldum*, i.e., and that the underside of the hindwing is much more extended

yellow. There are four orange side-patches on the abdomen on segments II to V, the first vestigial (♂) or small (♀), the second and third large, separated from each other only by the brown edge of the segment, fourth spot much smaller than second and third.

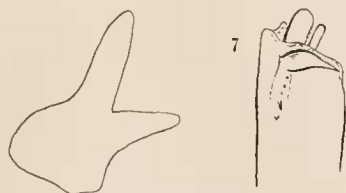


FIG. 6.—*L. demolini negus*.
,, 7.—*Macroglossum calescens*.

Genitalia of ♂ almost as in *M. castaneum* R. & J. (1903), but the harpe thicker, its apex curved down and the spikes pointing distad and ventrad, not dorsad; penis-sheath (text-fig. 7) with short pointed process, which is absent in *M. castaneum* and very long in *M. caldum*.

Two pairs from Telesea, New Britain, ii.-iv.1925 (A. F. Eichhorn).

11. *Hippotion moorei* sp. nov.

Close to *H. rosae* Butl. (1882), but head and thorax without a white lateral stripe.

Two subspecies :

(a) *H. moorei moorei*.

Body above silvery grey, slightly shaded with pink here and there, mesonotum anteriorly russet or chestnut, this colour extending along the tegulae as a diffuse line, underside a little more pink than upper, especially the breast; palpi, prosternum and pro- and midfemora more or less chestnut. Scaling of antenna pink.

Wings somewhat shorter than in *H. rosae*. Forewing as in that species, except that the transverse bands are a little more distinct, particularly the subbasal line, which forms an angle of 90° in the cell, the short costal arm of the angle being 8 to 9 mm. distant from base at costal margin and the long straight posterior arm reaching hindmargin 5 to 6 mm. from base, from the patch of black speckles at hindmargin two shadowy parallel bands extend forward to costa, nearly straight behind and then rounded, curving costad, the oblique blackish apical streak and the stigma as in *H. rosae*.—Hindwing vinaceous pink, terminal area grey, ill-defined, with slight suffusion of pink at the veins and extreme margin, the shadowy dark submarginal band of *H. rosae* barely indicated.

Underside : forewing more or less conspicuously vinaceous pink from base to disc, this colour gradually shading into the pinkish grey of the terminal area, hindwing grey washed with pink, most of the transverse striae pinkish, those of terminal area blackish, on both wings a postdiscal curved line, more or less distinct on forewing, sometimes obsolescent on hindwing.

Genitalia essentially as in *H. rosae*, the upper margin of the harpe a little more undulate.

Hab. Tanganyika Territory : Mwanza, Victoria Nyanza, xii.-i.1925/26 (Lt. M. S. Moore, V.C.), several ♂♂, type in Mus. Brit.

(b) *H. moorei canens* subsp. nov.

♀. Without any pink except on antenna.

Hab. Abyssinia : Dalada, 10.viii.1908 (R. E. Drake-Brockman), 1 ♀, type, in Brit. Mus. Somaliland : Malka Re, 1.v.1901 (C. von Erlanger), 1 ♀ in Mus. Tring.

In *H. rosae*, *H. moorei*, and *H. dexippus* Fawc. (1915), the clasper bears on the outer surface a subdorsal patch of numerous lanceolate scales ; in *H. roseipennis* Butl. (1882), *H. rebeli* R. & J. (1903), and *H. exclamationis* Fawc. (1915) the patch is replaced by a single, very large, scale.

The genitalia of the three ♂♂ of *H. rosae* compared by me are not quite alike ; these specimens being from different districts it is possible that the slight differences noticed by me are geographical, but a larger series must be examined before a more definite opinion can be expressed with some degree of reliability.
